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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kentaro Saito

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EXAMINER

BAIG, SAHAR A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,901	Applicant(s) SAITO ET AL.	
	Examiner SAHAR A. BAIG	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/09/2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 11, 20 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Yasukawa et al. US Patent No. 7,047,550 in view of Arsenault et al. US Patent No. 7,146,626.

Regarding Claims 1, 5, and 11, Yasukawa discloses a program information display device for displaying a scatter diagram by plotting three arbitrary

attributes selected by the viewer from at least three attributes relating to a program on at least an X-axis and a Y-axis, and disposing the program information at a position conforming to a first related value about an X-axis attribute, a second related value about a Y-axis attribute and a third related value **[Figure 21B]**, comprising:

a program information storage **[Figure 1 Step1]**;
a program information processor**[Figure 1 Step 2]**;
a program information display**[Figure 1 Step 4]**; and
an attribute input interface **[Figure 1 Step 3]**,

wherein the program information storage stores:

the program information **[Col 10 lines 21-27]**, and

at least the first related value about the X-axis attribute, the second related value about the Y-axis attribute and the third related value **[Col. 12 lines 23-30]**,

wherein the attribute input interface acquires a first attribute used as the X-axis of the scatter diagram, a second attribute used as the Y-axis of the scatter diagram and a third attribute associated with the third related value **[Col. 3 lines 50-54]**;

wherein the program information processor acquires the first attribute, the second attribute and the third attribute from the attribute input interface, and also acquires the program information **[Col. 10 lines 5-20]**.

Yasukawa fails to teach that each related value numerically expressing a respective degree of relation; the first related value about the first attribute, the second related value about the second attribute and the third related value from

the program information storage; wherein the program information display acquires the program information, the first attribute, the second attribute, the third attribute, the first related value, the second related value and the third related value from the program information processor, plots the first attribute and second attribute on the X-axis and the Y- axis of scatter diagram respectively, displays the program information at a position conforming to the first related value, the second related value and the third related value of the scatter diagram and indicates the third attribute on the scatter diagram at the position; and wherein the first related value, the second related value and the third related value are acquired by using any one of a broadcast wave, a wired broadcast, wireless communications and wired communication.

In an analogous art, Arsenault discloses a display method wherein each related value numerically expresses a respective degree of relation **[Figure 6]**; the first related value about the first attribute, the second related value about the second attribute and the third related value from the program information storage; wherein the program information display acquires the program information, the first attribute, the second attribute, the third attribute, the first related value, the second related value and the third related value from the program information processor **[Col. 9 line 24 - Col. 10 line 15]**, plots the first attribute and second attribute on the X-axis and the Y- axis of scatter diagram respectively, displays the program information at a position conforming to the first related value, the second related value and the third related value of the scatter diagram and

indicates the third attribute on the scatter diagram at the position **[Figure 4]**; and wherein the first related value, the second related value and the third related value are acquired by using any one of a broadcast wave, a wired broadcast, wireless communications and wired communication **[Figure 1 Satellite 16]**.

Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Arsenault and Yasukawa to provide the viewer with an easily searchable EPG system.

Regarding Claims 2 and 4, Yasukawa discloses a program information display device wherein the program information display displays icons, in addition to the program information, in the scatter diagram disposed at a position conforming to the first related value about the X-axis and the second related value about the Y-axis of the control information **[Col. 11 lines 26-32]**.

Regarding Claim 3, Yasukawa discloses a program information display device wherein the attribute is information about program, and this information includes channel, on- air time, genre, and viewing rate **[Col. 10 lines 4-20]**.

Regarding Claim 6, Arsenault discloses program information display device further comprising: a program information eliminator, wherein the program information storage stores at least one program information, and related value about at least the three attributes of the program information, the attribute input

interface further acquires further attribute and limit value of the further attribute as a threshold when displaying the program information in the scatter diagram **[Figure 5]**, the program information eliminator acquires the further attribute and the limit value of the further attribute from the attribute input interface, acquires the program information and the related value about the three attributes and the further attribute of the program information from the program information storage compares the related value about the further attribute of the related value about at least the three attributes of the program information with the limit value of the further attribute **[Figure 7 Step 164]**, eliminates the program information and related value about the three attributes of the program information when the related value about the further attribute is less than the limit value of the further attribute**[Figure 7 Step 164]**, and saves the program information and related value about the three attributes of the program information when the related value about the further attribute is not less than the limit value of the further attribute, and the program information processor acquires the first attribute, the second attribute and the third attribute from the attribute input interface, acquires the program information, the first related value about the first attribute, the second related value about the second attribute and the third related value among the program information and the related value about the three attributes of the program information saved in the program information eliminator, and thereby does not display the program information having the related value about

the further attribute less than the limit value of the further attribute in the scatter diagram **[Figure 7 Steps 174-178]**.

Regarding Claims 20 and 21, Arsenault discloses program information display device wherein the third attribute is used as a Z-axis of the scatter diagram, and the program information display plots the third attribute on the Z-axis **[Figure 4 Desirability is the Z axis attribute and can be modified]**.

5. Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Yasukawa et al. US Patent No. 7,047,550 in view of Arsenault et al. US Patent No. 7,146,626 in view of Wang et al. U.S. Patent No. 7,380,262.

Regarding Claim 7 and 8, the combined system of Yasukawa and Arsenault disclose all of the limitations except for the judging means acquiring the system information. In an analogous art, Wang discloses a system wherein the program information number judging means acquires program information from the program information processing means, judges the number of program information items, and sends the judged result to the program information processing means, and the program information processing means acquires the judged result from the program information number judging means, determines the information quantity of program information to be sent to the program information display means on the basis of the judged result, and thereby changes

the information quantity displaying the program information depending on the number of program information items displayed in the scatter diagram **[Col 1 lines 59-66]**. Therefore it would have been obvious to one of ordinary skill in the art to combine the above references to devise an EPG that facilitates decision making for the user.

6. Claims 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Yasukawa et al. US Patent No. 7,047,550 in view of Arsenault et al. US Patent No. 7,146,626 in further view of Matey U.S. Patent Publication No. 2001/0049823.

Regarding Claims 9 and 10, the combined system of Yasukawa and Arsenault disclose all of the limitations except the character display size setting means. In an analogous art, Matey discloses an EPG system wherein a user can adjust the display of the EPG on the display screen in different font sizes, or colors etc. **[0012]**. Therefore, it would have been obvious to include this feature at the time the invention was made for the benefit of facilitating better viewing of the guide data.

7. Claims 12-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Yasukawa et al. US Patent No. 7,047,550 in view of Arsenault et al. US Patent No. 7,146,626 in further view of Bentolila U.S. Patent Publication No. 2003/0101451.

Art Unit: 2424

Regarding Claim 12 and 13, the combined system of Yasukawa and Arsenault meet all of the limitations except the use of virtual channels in the EPG. In an analogous art, Bentolila discloses a system wherein virtual channels are automatically created and are presented as a separate channel in an electronic programming guide (EPG) [0055]. Bentolila also shows that the programs and showing times are placed as the user would more like it satisfying the claim that the channel assigning means determines the virtual channel to be assigned in the ascending order or the descending order from the program information [0459]. Therefore, it would have been obvious to include virtual channels in the EPG display as claimed for the benefit of letting the user decide which program to view.

Regarding Claims 14-18, Official Notice is taken on the limitations wherein the combination of program information and assigned virtual channels (EPG data) is maintained for a specific time period/or until the power is cut off / or until the program corresponding to the program information is terminated. Fig 29 of Yasukawa shows Memory means 30 capable of storing the information for a specific time period. It is well known in the art that volatile memory means can only store data until the power is terminated. As for maintaining the program guide information until the program corresponding to the program information is terminated, all EPGs are capable of displaying information about programs that are going to commence immediately and not the programs that just ended broadcasting.

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Regarding claim 19, the combined system of Yasukawa, Arsenault , and Bentolila disclose that it is possible to have included the use of virtual channels in the claimed invention's EPG. It is well known in the art that, in an EPG, a program is displayed for viewing on the display screen once the user has selected it. Therefore it would have been obvious at the time the invention was made to include a virtual channel that could have been selected for viewing once the user specified it for viewing preference.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It includes Aoki et al. US Patent Publication No. 2006/0130096.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR A. BAIG whose telephone number is (571)270-3005. The examiner can normally be reached on Monday-Friday (8:00 - 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2424

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Kelley/
Supervisory Patent Examiner, Art
Unit 2424

SB